

WHAT IS CLAIMED IS:

1. A method for decoding time data which defines a point of time for outputting a decoded frame of a video image, the method comprising:

5        decoding an encoded bit stream in units of one frame to generate decoded video data and a plurality of decoded header information items for each frame;

      detecting the time data included in each of the header information items; and

10        determining identical time data which define identical points of time and are detected from at least two of the header information items as frame time data  
      determining the point of time for outputting the decoded frame.

15        2. A method according to claim 1, wherein the determining step determines as the frame time data the identical time data detected from at least continuous two of the header information items.

20        3. A method according to claim 1, wherein the determining step determines as the frame time data the time data of an initial one of the header information items when the time data of the initial header information item is detected from continuous two of the header information items which follow after the initial  
25        header information item.

      4. A method according to claim 1, wherein the determining step determines as the frame time data the

identical time data detected from continuous ones of the header information items which are after an initial one of the header information items.

5        5. A method according to claim 1, wherein the determining step determines as the frame time data the identical time data detected from some of the header information items which are after an initial one of the header information items.

10       6. A method according to claim 1, wherein the determining step determines as the frame time data the identical time data at a time when the identical time data is detected from at least continuous three of the header information items

15       7. A method according to claim 1, wherein the determining step determines as the frame time data the identical time data detected from some of the header information items which are after the second one of the header information items when the time data of the first one of the header information items is not  
20       decoded.

25       8. A method according to claim 1, wherein the determining step determines as the frame time data the identical time data detected from ones of the header information items which are larger in number than the others of the header information items which have another identical time data different from the identical time data detected from the ones of the

header information items.

9. A method according to claim 1, wherein the determining step determines as the frame time data the identical time data detected from continuous ones of the header information items.

10. A method according to claim 1, which includes advancing the frame time data by a unit time when an amount of data stored in a date domain of a buffer memory that stores the encoded bit stream exceeds a given threshold value, and delaying the frame time data by a time unit when the amount of data is less than the threshold value.

11. A method according to claim 1, wherein the decoding step decodes the encoded bit stream for each frame including a plurality of packets including the header information items, respectively.

12. A method for decoding time data which defines a point of time for decoding and outputting a picture of a video image, the picture including at least one field, the method comprising:

decoding an encoded bit stream in units of one picture to generate decoded video data and a plurality of decoded header information items for each picture;

detecting time data included in each of the header information items; and

determining identical time data which define identical points of time and are detected from at least

two of the header information items as picture time data indicating the point of time for outputting the decoded frame.

13. A method according to claim 12, wherein the  
5 determining step determines as the picture time data the identical time data detected from at least continuous some of the header information items.

14. A method for decoding time data which defines a  
10 point of time for outputting a decoded frame of a video image, the method comprising:

searching a plurality of header information items of the frame for time data contained in an encoded bit stream obtained by encoding the video image; and

15 determining, as the time data which defines the point of time for outputting the decoded frame, time data detected from two or more of the header information items and defining identical points of time.

15. A method according to claim 14, wherein, when  
20 a data quantity of a buffer data domain in which the encoded bit stream is stored exceeds a predetermined threshold value, decoded frame time data is advanced by a unit time, and when the data quantity is equal to or smaller than the threshold value, the frame time data is delayed by a unit time.

25 16. A method for decoding time data which defines a point of time for outputting a decoded frame of a video image, the method comprising:

searching a plurality of header information items of each frame for the time data for each frame, the time data being contained in an encoded bit stream obtained by encoding the video image;

5           determining time data detected from the first one of the header information items as the time data defining the point of time for outputting the decoded frame when time data identical to time data detected from the first one of the header information items has  
10           been detected from the second one of the header information items, and when time data identical to time data detected from the first header information item is not detected from the second header information item and time data identical to the time data detected from  
15           the first header information item is detected from two continuous items of third and subsequent header information items; and

          determining time data detected from the continuous three header information items as the picture time data  
20           defining the point of time when the time data identical to time data detected from the first header information item is not detected from the second header information item and has been detected from three continuous items of second and subsequent header information items, and  
25           when the time data is not detected from the first header information item and time data detected from three continuous items of the second and subsequent

header information items define identical points of time.

- 5        17. A method according to claim 16, wherein, when a data quantity of a buffer data domain in which the encoded bit stream is stored exceeds a predetermined threshold value, decoded frame time data is advanced by a unit time, and when the data quantity is equal to or smaller than the threshold value, the frame time data is delayed by a unit time.